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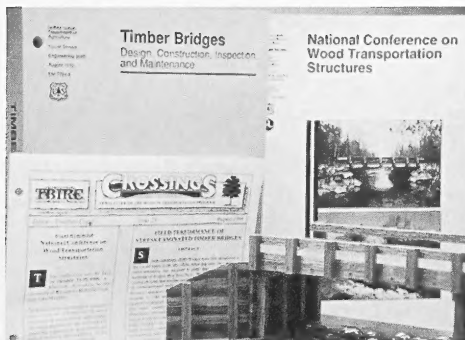
National Wood In  
Transportation  
Information Center

Morgantown, WV

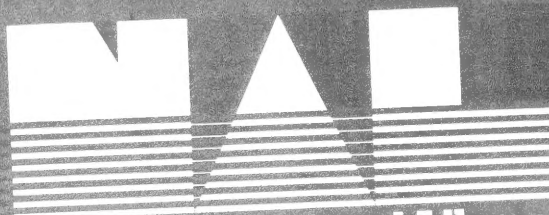
NA-GR-01-97

# Wood In Transportation Publications List

A Guide to the Publications Available from  
the National Wood In Transportation  
Information Center – The Nation's  
Clearinghouse for Information about  
Wood In Transportation Applications



United States  
Department of  
Agriculture



**National Agricultural Library**

100 Canfield Street  
Morgantown, WV 26505  
Telephone: 304/285-1591  
FAX: 304/285-1564

or

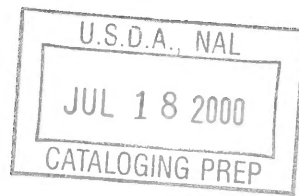
Visit our Website at:  
<http://www.fs.fed.us/na/wit>

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# Wood In Transportation Publications List

National Wood In Transportation  
Information Center

Morgantown, WV



Revised October 1999

Third Edition

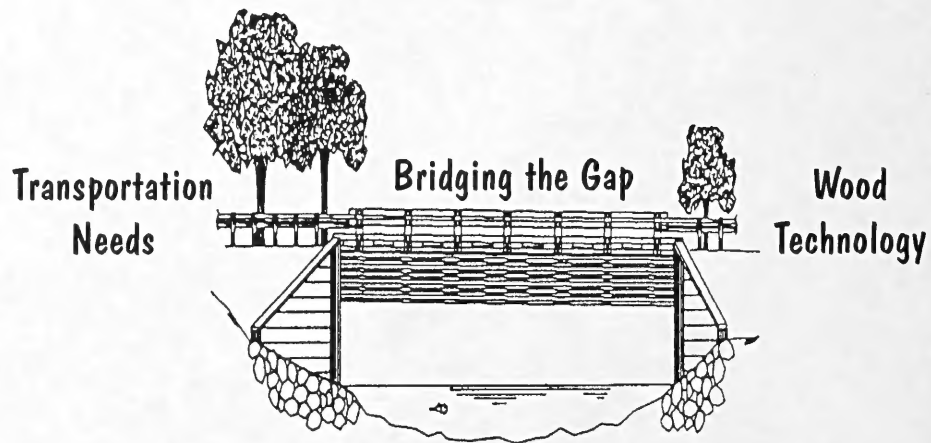


USDA Forest Service

Administered by  
Northeastern Area  
State & Private Forestry



# The Wood In Transportation Program



## The Goal of WIT ...

- Forest stewardship
- Economic vitality
- Revitalization

... through a variety of transportation applications.

# Table of Contents

Page

Introduction .....	i
01 — Wood In Transportation Program Information .....	1
02 — Design and Bridge Plans .....	4
03 — Inspection .....	10
04 — Maintenance and Rehabilitation .....	11
05 — Preservative Treatment .....	11
06 — Monitoring and Performance .....	13
07 — Materials .....	18
08 — Contacts .....	20
09 — Markets .....	21
10 — Cost Information .....	22
11 — General Information .....	23
12 — Surfacing .....	24
13 — Financial Information .....	25
14 — Crossings Newsletter .....	25
15 — Demonstration Project Factsheets .....	25
97 — Videos .....	30
Additional Sources of Information .....	31
Publications Request Form .....	Inside Back Cover

# Introduction

The purpose of The Wood In Transportation Program is to improve the Nation's transportation infrastructure by using one of our most renewable resources, wood, for the construction of transportation structures such as:

- bridges
  - vehicular
  - portable
  - pedestrian and trail
- railway structures
- retaining walls
- box culverts
- sound barriers
- highway signs
- marine structures

The backbone of The Wood In Transportation (WIT) Program is technology transfer. Technical information on building vehicular and pedestrian bridges, portable bridges for temporary access, railway structures, and other transportation structures with timber has to be readily available and easy to understand.

The WIT Program's technology transfer activities are coordinated by the National Wood In Transportation Information Center (NWITIC) in Morgantown, West Virginia. The Center plays a vital role in fostering information sharing with highway officials, community leaders, and others across the Nation.

In its role as the Nation's clearinghouse for Wood In Transportation information, NWITIC has developed this publication list to inform interested individuals about the publications available from the Center. It includes a section labeled "*Additional Sources of Information*" which provides addresses and telephone numbers that may be used to obtain documents that cannot be issued by NWITIC. This listing will be updated on an as needed basis. New publications will be listed in the WIT Program's quarterly newsletter, *Crossings*.

You may request publications from this listing by marking your selections on the attached Publications Request Form. Please place an X in the box next to the code number of the publications you would like to receive. Fill out the name and address portion of the mailer as clearly as possible, and fold the request form in half. Tape the folded form shut so the NWITIC address is visible and return it to us. Postage is required. We will respond to your request as quickly as possible.

Edward T. Cesa  
Program Coordinator  
The Wood In Transportation Program



## Section 01 — Wood In Transportation Program Information

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### **Library ID: 01-0001**

**Title:** Wood In Transportation Program Annual Status Report

Author: National Wood In Transportation Information Center (NWITIC) and Information Services (InS)

Publisher: USDA Forest Service, Northeastern Area, State and Private Forestry (NA-S&PF)

Year Published: 1999                      Number of Pages: 13

### **Library ID: 01-0002**

**Title:** Wood In Transportation Program Brochure

Author: NWITIC and InS

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 2

### **Library ID: 01-0003**

**Title:** Wood In Transportation Program Fact Sheet

Author: NWITIC and InS

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 2

### **Library ID: 01-0004**

**Title:** Crossings Newsletter of The Wood In Transportation Program

Author: NWITIC and InS

Publisher: USDA Forest Service, NA-S&PF

Year Published: Quarterly                      Number of Pages: 12

### **Library ID: 01-0005**

**Title:** Wood In Transportation Project Application

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 27

### **Library ID: 01-0006**

**Title:** National Timber Bridge Student Design Competition Information

Author: SW Mississippi Resource Conservation and Development (RC&D), Inc.

Publisher: SW Mississippi RC&D, Inc.

Year Published: 1997                      Number of Pages: 2

### **Library ID: 01-0007**

**Title:** Award Winning Timber Bridges, Summer 1995

Author: American Forest and Paper Association (AF&PA)

Publisher: AF&PA

Year Published: 1995                      Number of Pages: 8

## **Section 01 — Wood In Transportation Program Information *cont.***

### **Library ID: 01-0010**

**Title:** **Modern Timber Bridges of West Virginia: Volume 1**

Author: Barry Dickson, Constructed Facilities Center, (CFC) West Virginia University (WVU)

Publisher: CFC, WVU

Year Published: 1995                      Number of Pages: 53

### **Library ID: 01-0011**

**Title:** **Modern Timber Bridges in West Virginia: Volume 2**

Author: Barry Dickson, CFC, WVU

Publisher: CFC, WVU

Year Published: 1995                      Number of Pages: 82

### **Library ID: 01-0012**

**Title:** **Hoblitt-Bass Timber Bridge Project, Ravalli County, Montana**

Author: NWITIC and InS

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1995                      Number of Pages: 30

### **Library ID: 01-0017**

**Title:** **Wood In Transportation Publications List**

Author: NWITIC and InS

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 25

### **Library ID: 01-0018**

**Title:** **Wood In Transportation Program - Special Projects, Fiscal Years 1989 through 1997**

Author: NWITIC and InS

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 87

### **Library ID: 01-0019**

**Title:** **Proceedings of the National Conference on Wood Transportation Structures**

Author: Forest Products Laboratory (FPL)

Publisher: USDA Forest Service, FPL

Year Published: 1996                      Number of Pages: 494

### **Library ID: 01-0020**

**Title:** **The Federal Highway Administration's Highway Timber Bridge Research and Demonstration Program, Status Report 1996**

Author: USDOT FHWA

Publisher: USDOT FHWA

Year Published: 1996                      Number of Pages: 15

## **Section 01 — Wood In Transportation Program Information *cont.***

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### **Library ID: 01-0021**

**Title:** Wood In Transportation Plan of Work: Fiscal Year 1998

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 24

### **Library ID: 01-0022**

**Title:** Wood In Transportation Fact Sheet, Stress-Laminated Modern Timber Bridges

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1996                      Number of Pages: 2

### **Library ID: 01-0024**

**Title:** National Wood In Transportation Information Center's Annual Technology Transfer Report

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1997                      Number of Pages: 4

### **Library ID: 01-0026**

**Title:** Salt Storage Facility, Cedar County, IA: Special Project Fiscal Year 1995

Author: Kasey Russell

Publisher: NWITIC

Year Published: 1998                      Number of Pages: 5

### **Library ID: 01-0027**

**Title:** Wood In Transportation Program Website Brochure

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 2

**Abstract:** WIT Website Brochure provides an overview of the features available over the Internet. These features include information about WIT Publications, WIT Grants, WIT Events, WIT Links, and WIT Program Coordinators. The Brochure also briefly describes the USDA Forest Products Laboratory's Wood In Transportation Website.

## Section 02 — Design and Bridge Plans

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### **Library ID: 02-0001**

**Title:** **Timber Bridges: Design, Construction, Inspection and Maintenance**

Author: Michael A. Ritter

Publisher: USDA Forest Service, FPL

Year Published: 1992                      Number of Pages: 950

### **Library ID: 02-0002**

**Title:** **Standard Plans for Southern Pine Bridges**

Author: Paula D. Hilbrich Lee, Michael A. Ritter, Michael Triche

Publisher: USDA Forest Service, FPL

Year Published: 1995                      Number of Pages: 26

### **Library ID: 02-0003**

**Title:** **Plans for Crash-Tested Bridge Railings for Longitudinal Wood Decks**

Author: Michael A. Ritter, Ronald K. Faller, Paula D. Hilbrich Lee, Barry T. Rosson, Sheila Rimal Duwadi

Publisher: USDA Forest Service, FPL

Year Published: 1995                      Number of Pages: 27

### **Library ID: 02-0004**

**Title:** **Design, Construction, and Quality Control Guidelines for Stress-Laminated Timber Bridge Decks**

Author: J. F. Davalos, S. H. Petro

Publisher: USDOT FHWA

Year Published: 1993                      Number of Pages: 58

### **Library ID: 02-0005**

**Title:** **Materials for and Design of Hardwood Glulam Bridges**

Author: Harvey B. Manbeck, Keith Shaffer

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1994                      Number of Pages: 57

### **Library ID: 02-0006**

**Title:** **Engineered Composite Bridge Plans**

Author: Trus Joist MacMillan

Publisher: Trus Joist MacMillan

Year Published: 1995                      Number of Pages: 6

### **Library ID: 02-0008**

**Title:** **Using Lightweight Metal Plate Connector Wood Trusses in Bridges**

Author: H. Dagher, V. Caccese, F. Altimore, Y Hsu, R. Wolfe, M. Ritter

Publisher: American Society of Civil Engineers

Year Published: 1995                      Number of Pages: 4

## **Section 02 — Design and Bridge Plans *cont.***

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### **Library ID: 02-0009**

**Title:** Vermont/New Hampshire Timber Retaining Wall Design Package

Author: North Country RC&D

Publisher: North Country RC&D

Year Published: 1994                      Number of Pages: 7

### **Library ID: 02-0010**

**Title:** Field Performance of Timber Bridges: 2. Cooper Creek Stress-Laminated Deck Bridge, Design, Construction and Evaluation of Timber Bridge Constructed of Cottonwood Lumber

Author: Michael A. Ritter, James P. Wacker, Everett P. Tice

Publisher: USDA Forest Service, FPL

Year Published: 1995                      Number of Pages: 30

### **Library ID: 02-0011**

**Title:** Portable Glulam Timber Bridge Design for Low-Volume Forest Roads

Author: S. E. Taylor, K. P. Keliher, J. D. Thompson, M.A. Ritter, G. L. Murphy

Publisher: National Academy Press

Year Published: 1995                      Number of Pages: 12

### **Library ID: 02-0012**

**Title:** Timber Box Culverts - Plans, Timber Substructures for Bridge Applications

Author: J. F. Davalo, S. H. Petro

Publisher: USDOT FHWA

Year Published: 1994                      Number of Pages: 111

### **Library ID: 02-0013**

**Title:** Smith Rapids Covered Bridge Plan, Chequamegon National Forest, Price County, WI

Author: Art Johnson

Publisher: USDA Forest Service, National Forest System (NFS)

Year Published: 1990                      Number of Pages: 8

### **Library ID: 02-0017**

**Title:** Design, Fabrication, Testing, and Installation of a Press-Lam Bridge

Author: J. A. Youngquist, D. S. Gromala, R. W. Jokerst, R. C. Moody, J. L. Tschernitz

Publisher: USDA Forest Service, FPL

Year Published: 1979                      Number of Pages: 18

### **Library ID: 02-0018**

**Title:** Designing Timber Bridges for Long Life

Author: Frank W. Muchmore

Publisher: USDA Forest Service, NFS

Year Published: 1986                      Number of Pages: 15

## **Section 02 — Design and Bridge Plans *cont.***

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### **Library ID: 02-0019**

**Title:**           **Development and Use of Stress-Laminated Timber Deck Bridges**

Author:           Michael G. Olive, Al G. Dimakis, Michael A. Ritter

Publisher:       American Society of Civil Engineers

Year Published:   1987                      Number of Pages:    7

### **Library ID: 02-0020**

**Title:**           **Stress-Laminated Timber Deck Bridges: Prototype Project 1988**

Author:           Michael G. Oliva; Michael Ritter; Al G. Dimakis

Publisher:       Forest Products Research Society

Year Published:   1988                      Number of Pages:    6

### **Library ID: 02-0021**

**Title:**           **Performance Level 1 Bridge Railings for Timber Decks**

Author:           Ronald K. Faller; Michael A. Ritter; James C. Holloway; Brian G. Pfeifer; Barry T. Rosson

Publisher:       USDA Forest Service, FPL

Year Published:   1992                      Number of Pages:    36

### **Library ID: 02-0023**

**Title:**           **Wood Design Focus: Stress-Laminated Timber Bridges, Vol. 6, No. 2, Summer 1995**

Author:           Stephen Smulski

Publisher:       Forest Products Society

Year Published:   1995                      Number of Pages:    24

### **Library ID: 02-0025**

**Title:**           **Procedure for Design of Glued-Laminated Orthotropic Bridge Decks**

Author:           William J. McCutcheon, Roger L Tuomi

Publisher:       USDA Forest Service, FPL

Year Published:   1973                      Number of Pages:    42

### **Library ID: 02-0026**

**Title:**           **Simplified Design Procedure for Glued-Laminated Bridge Decks**

Author:           W.J. McCutcheon, R.L. Tuomi

Publisher:       USDA Forest Service, FPL

Year Published:   1974                      Number of Pages:    8

### **Library ID: 02-0027**

**Title:**           **Wood Highway Noise Barrier Specifications**

Author:           National Forest Products Association (NFPA) Staff

Publisher:       NFPA

Year Published:   1981                      Number of Pages:    6

## **Section 02 — Design and Bridge Plans *cont.***

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### **Library ID: 02-0028**

**Title:**           **Erection Procedure for Glued-Laminated Timber Bridge Decks with Dowel Connectors**

Author:           Roger L. Tuomi

Publisher:       USDA Forest Service, FPL

Year Published:   1976                      Number of Pages:   15

### **Library ID: 02-0029**

**Title:**           **Design Procedure for Glued-Laminated Bridge Decks**

Author:           Roger L. Tuomi, William J. McCutcheon

Publisher:       USDA Forest Service, FPL

Year Published:   1972                      Number of Pages:   8

### **Library ID: 02-0032**

**Title:**           **Innovations in Glulam Timber Bridge Design**

Author:           Michael A. Ritter , Thomas G. Williamson, Russell C. Moody

Publisher:       American Society of Civil Engineers

Year Published:   1994                      Number of Pages:   6

### **Library ID: 02-0033**

**Title:**           **LRFD Provisions for Wood Bridges**

Author:           Michael A. Ritter, Andrzej S. Nowak

Publisher:       American Society of Civil Engineers

Year Published:   1994                      Number of Pages:   6

### **Library ID: 02-0035**

**Title:**           **Design and Evaluation of Two Bridge Railings for Low-Volume Roads**

Author:           Ronald K. Faller, Barry T. Rosson, Dean L. Sicking, Michael A. Ritter, Steve Bunnell

Publisher:       National Academy Press

Year Published:   1995                      Number of Pages:   16

### **Library ID: 02-0036**

**Title:**           **Load and Resistance Factor Design Code for Wood Bridges**

Author:           Andrzej S. Nowak, Michael A. Ritter

Publisher:       National Academy Press

Year Published:   1995                      Number of Pages:   7

### **Library ID: 02-0037**

**Title:**           **State of the Art Report: Glulam Timber Bridge Design in the U.S.**

Author:           M.A. Ritter, T.G. Williamson

Publisher:       Universitat Karlsruhe

Year Published:   1995                      Number of Pages:   11

## Section 02 — Design and Bridge Plans *cont.*

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### **Library ID: 02-0038**

**Title:** **Portable Timber Bridges: An Eco-friendly Solution for Stream Crossings**

Author: Kasey Russell

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1997                      Number of Pages: 8

### **Library ID: 02-0039**

**Title:** **Recommended Construction Practices for Stress-Laminated Wood Bridge Decks**

Author: Michael A. Ritter, Paula D. Hilbrich Lee

Publisher: USDA Forest Service, FPL

Year Published: 1997                      Number of Pages: 8

### **Library ID: 02-0040**

**Title:** **LRFD for Engineered Wood Structures-Connection Behavioral Equations**

Author: Thomas E. McLain, Lawrence A. Soltis, David G. Pollock, Jr., Thomas L. Wilkinson

Publisher: American Society of Civil Engineers, Journal of Structural Engineering

Year Published: 1993                      Number of Pages: 15

### **Library ID: 02-0041**

**Title:** **Shear Strength of Unchecked Glued-Laminated Beams**

Author: Lawrence A. Soltis, Douglas R. Rammer

Publisher: Forest Products Society

Year Published: 1994                      Number of Pages: 7

### **Library ID: 02-0042**

**Title:** **Skidder Bridge Fact Sheet**

Author: David B. Kittredge, Jr., Claiborne Woodall, Anne Marie Kittredge

Publisher: University of Massachusetts Extension Service

Year Published: 1997                      Number of Pages: 1

### **Library ID: 02-0043**

**Title:** **Log Stringer Trail Bridge Design Aid**

Author: USDA Forest Service, Region 1 Engineering Staff

Publisher: USDA Forest Service, Region 1

Year Published: 1997                      Number of Pages: 1

### **Library ID: 02-0044**

**Title:** **Open Web Joist Trail Bridge Design Aid**

Author: USDA Forest Service, Region 1 Engineering Staff

Publisher: USDA Forest Service, Region 1

Year Published: 1997                      Number of Pages: 1



## **Section 02 — Design and Bridge Plans *cont.***

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### **Library ID: 02-0045**

**Title:** **Glued Laminated-Nail Laminated Slab Trail Bridge Design Aid**

Author: USDA Forest Service, Region 1 Engineering Staff

Publisher: USDA Forest Service, Region 1

Year Published: 1997                      Number of Pages: 1

### **Library ID: 02-0046**

**Title:** **Plans for Crash-Tested Wood Bridge Railings for Concrete Decks**

Author: Michael A. Ritter, Ronald K. Faller, Paula D. Hilbrich Lee, Barry T. Rosson, Sheila Rimal Duwadi

Publisher: USDA Forest Service, FPL

Year Published: 1999                      Number of Pages: 17

### **Library ID: 02-0047**

**Title:** **Plans for Crash-Tested Bridge Railings for Longitudinal Wood Decks on Low-Volume Roads**

Author: Michael A. Ritter, Ronald K. Faller, Steve Bunnell, Paula D. Hilbrich Lee, Barry T. Rosson

Publisher: USDA Forest Service, FPL

Year Published: 1999                      Number of Pages: 11

### **Library ID: 02-0048**

**Title:** **Design and Construction of the Pochuck Quagmire Bridge - A Suspension Timber Bridge**

Author: Tibor Latincsics

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 130

## Section 03 — Inspection

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### **Library ID: 03-0001**

**Title:**           **Nondestructive Testing for Assessing Wood Members in Structures:  
A Review**

Author:           Robert J. Ross, Roy F. Pellerin  
Publisher:        USDA Forest Service, FPL  
Year Published:   1994                      Number of Pages:   39

### **Library ID: 03-0002**

**Title:**           **Determining In-Situ Timber Pile Length Using Stress Waves**

Author:           Engineering Data Management, Inc.  
Publisher:        USDA Forest Service, NA-S&PF  
Year Published:   1992                      Number of Pages:   18

### **Library ID: 03-0003**

**Title:**           **Wood Bridges - Decay Inspection and Control**

Author:           Wallace E. Eslyn, Joe W. Clark  
Publisher:        USDA Forest Service, FPL  
Year Published:   1979                      Number of Pages:   35

### **Library ID: 03-0005**

**Title:**           **Evaluation of Timber Bridges Using Stress Wave Technology**

Author:           R. Pellerin, R. Ross, R. Falk, N. Volny  
Publisher:        Pacific Timber Engineering Conference  
Year Published:   1994                      Number of Pages:   8

### **Library ID: 03-0007**

**Title:**           **Inspection of Timber Bridges Using Stress Wave Timing Nondestructive  
Evaluation Tools**

Author:           Robert J. Ross, Roy F. Pellerin, Norbert Volny, William W. Salsig, Robert H. Falk  
Publisher:        USDA Forest Service, FPL  
Year Published:   1999                      Number of Pages:   15

## Section 04 — Maintenance and Rehabilitation

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### **Library ID: 04-0002**

**Title:** Performance and Rehabilitation of Timber Bridges

Author: William J. McCutcheon, Richard M. Gutkowski, Russell C. Moody

Publisher: Transportation Research Board

Year Published: 1986                      Number of Pages: 3

### **Library ID: 04-0003**

**Title:** Techniques to Bring New Life to Timber Bridges

Author: Frank W. Muchmore

Publisher: USDA Forest Service, NFS

Year Published: 1985                      Number of Pages: 17

### **Library ID: 04-0005**

**Title:** Maintenance Practices for Wood Bridges

Author: Michael A. Ritter, Thomas G. Williamson

Publisher: American Society of Civil Engineers

Year Published: 1995                      Number of Pages: 6

## Section 05 — Preservative Treatment

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### **Library ID: 05-0001**

**Title:** Selection and Use of Preservative Treated Wood in Forest Service  
Recreational Structures

Author: Stan T. LeBow, William J. Makel

Publisher: USDA Forest Service, FPL

Year Published: 1995                      Number of Pages: 12

### **Library ID: 05-0002**

**Title:** AWPI Consumers Guide to the Proper Use of Treated Wood

Author: American Wood Preservers Institute (APWI)

Publisher: APWI

Year Published: unkn                      Number of Pages: 8

### **Library ID: 05-0005**

**Title:** Preservative Treatment of Hardwoods: A Review

Author: Warren S. Thompson, Peter Koch

Publisher: USDA Forest Service, FPL

Year Published: 1981                      Number of Pages: 47

### **Library ID: 05-0007**

**Title:** Treated Wood Products, Their Effect on the Environment

Author: D. A. Webb, L. R. Gjovik

Publisher: USDA Forest Service, FPL

Year Published: 1988                      Number of Pages: 6

## **Section 05 — Preservative Treatment *cont.***

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### **Library ID: 05-0009**

**Title:** **A Report to the Wood-Preserving Industry in the United States**

Author: James T. Mickelwright

Publisher: American Wood Preservers Institute

Year Published: 1989                      Number of Pages: 19

### **Library ID: 05-0010**

**Title:** **Corrosion Protection of Steel Hardware Used in Modern Timber Bridges**

Author: J. F. Davalos, S. H. Petro

Publisher: USDOT FHWA

Year Published: 1993                      Number of Pages: 50

### **Library ID: 05-0011**

**Title:** **Wood Preservation In West Virginia - Appalachian Hardwood Center:  
Fact Sheet 9**

Author: Appalachian Hardwood Center (AHC), Division of Forestry, West Virginia University

Publisher: AHC

Year Published: 1992                      Number of Pages: 8

### **Library ID: 05-0013**

**Title:** **Leaching of Wood Preservative Components and Their Mobility in the  
Environment - Summary of Pertinent Literature**

Author: Stan LeBow

Publisher: USDA Forest Service, FPL

Year Published: 1996                      Number of Pages: 36

### **Library ID: 05-0014**

**Title:** **Preservative Treatment of Red Maple**

Author: William B. Smith, Nazri Abdullah, Douglas Herdman, Rodney C. DeGroot

Publisher: Forest Products Society

Year Published: 1996                      Number of Pages: 7

### **Library ID: 05-0016**

**Title:** **Working for Rural America; Wood Double-Diffusion Treatment Plant,  
Tyonek Native Corporation, Kenai Borough, Alaska**

Author: Kasey Russell, Ken Kilborn

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1997                      Number of Pages: 5

## Section 06 — Monitoring and Performance

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### **Library ID: 06-0001**

**Title:**           **Field Performance of Timber Bridges 1. Teal River Stress-Laminated Deck Bridge**

Author:           James P. Wacker, Michael A. Ritter

Publisher:       USDA Forest Service, FPL

Year Published:   1992                      Number of Pages:    19

### **Library ID: 06-0002**

**Title:**           **Field Performance of Timber Bridges 2. Cooper Creek Stress-Laminated Deck Bridge**

Author:           Michael A. Ritter, James P. Wacker, Everett D. Tice

Publisher:       USDA Forest Service, FPL

Year Published:   1995                      Number of Pages:    17

### **Library ID: 06-0003**

**Title:**           **Field Performance of Timber Bridges 3. Birchlog Run and Tumbling Rock Run Stress-Laminated Deck Bridge**

Author:           James P. Wacker, Michael A. Ritter

Publisher:       USDA Forest Service, FPL

Year Published:   1995                      Number of Pages:    11

### **Library ID: 06-0004**

**Title:**           **Field Performance of Timber Bridges 4. Graves Crossing Stress-Laminated Deck Bridge**

Author:           James P. Wacker, Michael A. Ritter

Publisher:       USDA Forest Service, FPL

Year Published:   1995                      Number of Pages:    17

### **Library ID: 06-0005**

**Title:**           **Field Performance of Timber Bridges 5. Little Salmon Creek Stress-Laminated Deck Bridge**

Author:           Michael A. Ritter, James A. Kainz, Gregory J. Porter

Publisher:       USDA Forest Service, FPL

Year Published:   1996                      Number of Pages:    15

### **Library ID: 06-0006**

**Title:**           **Field Performance of Timber Bridges 8. Lynches Woods Park Stress-Laminated Deck Bridge**

Author:           James P. Wacker, Michael A. Ritter, Don Conger

Publisher:       USDA Forest Service, FPL

Year Published:   1996                      Number of Pages:    17

## **Section 06 — Monitoring and Performance *cont.***

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### **Library ID: 06-0007**

**Title:** Field Monitoring of A Stressed Timber Bridge Over Elk Two-Mile Creek

Author: Barry Dickson, Dr. Hota V. S. GangaRao

Publisher: 6th Annual International Bridge Conference

Year Published: 1989                      Number of Pages: 7

### **Library ID: 06-0009**

**Title:** Comparative Performance of Timber Bridges

Author: Richard M. Gutkowski, William J. McCutcheon

Publisher: Journal of Structural Engineering

Year Published: 1987                      Number of Pages: 19

### **Library ID: 06-0011**

**Title:** The Mormon Creek Bridge - Performance After Three Years

Author: William J. McCutcheon

Publisher: USDA Forest Service, NFS

Year Published: 1992                      Number of Pages: 8

### **Library ID: 06-0013**

**Title:** Stress-Laminated Wood Bridge Decks - Experimental and Analytical Evaluations

Author: Michael G. Oliva, Al G. Dimakis, Michael A. Ritter, Roger L. Tuomi

Publisher: USDA Forest Service, FPL

Year Published: 1990                      Number of Pages: 19

### **Library ID: 06-0014**

**Title:** Field Performance of U.S. Stress-Laminated Wood Bridges

Author: Michael A. Ritter, Michael G. Oliva

Publisher: Proceedings of the 1990 International Timber Bridge Engineering Conference

Year Published: 1990                      Number of Pages: 6

### **Library ID: 06-0015**

**Title:** Methods for Assessing the Field Performance of Stress-Laminated Timber Bridges

Author: Michael A. Ritter, Earl A. Geske, William J. McCutcheon, Russell C. Moody, James P. Wacker, Lola E. Mason

Publisher: 1991 International Timber Engineering Conference, London, UK

Year Published: 1991                      Number of Pages: 8

### **Library ID: 06-0016**

**Title:** Load Distribution in Glued-Laminated Longitudinal Timber Deck Highway Bridges

Author: W. W. Sanders, Jr., F. W. Klaiber, T. J. Wipf

Publisher: American Institute of Timber Construction

Year Published: 1985                      Number of Pages: 47

## Section 06 — Monitoring and Performance *cont.*

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### **Library ID: 06-0021**

**Title:**           **Field Performance of Stress-Laminated Timber Bridges on Low-Volume Roads**

Author:           Michael A. Ritter, James P. Wacker, Sheila Rimal Duwadi

Publisher:       National Academy Press

Year Published:   1995                      Number of Pages:    10

### **Library ID: 06-0022**

**Title:**           **New Technology, Local Labor, Local Material: Timber Bridge Demonstration Project; The North Road Bridge**

Author:           Eileen D. Young

Publisher:       Cooperative Extension, University of Rhode Island

Year Published:   1995                      Number of Pages:    12

### **Library ID: 06-0023**

**Title:**           **Performance of Steel, Concrete, Prestressed Concrete, and Timber Bridges**

Author:           Kim Stanfill-McMillan, Cherilyn A. Hatfield

Publisher:       The Canadian Society for Civil Engineering

Year Published:   1994                      Number of Pages:    14

### **Library ID: 06-0024**

**Title:**           **Behavior of Stress-Laminated Parallel-Chord Timber Bridge Decks: Experimental and Analytical Studies**

Author:           Al G. Dimakis, Michael G. Oliva, Michael A. Ritter

Publisher:       USDA Forest Service, FPL

Year Published:   1992                      Number of Pages:    19

### **Library ID: 06-0025**

**Title:**           **Dynamic Response of Stress-Laminated Deck Bridges**

Author:           M. A. Ritter, D. L. Wood, T. J. Wipf, Chintaka Wijesooriya, S. R. Duwadi

Publisher:       National Academy Press

Year Published:   1995                      Number of Pages:    14

### **Library ID: 06-0026**

**Title:**           **Design and Field Performance of a Metal-Plate-Connected Wood Truss Bridge**

Author:           Michael H. Triche, Michael A. Ritter, Stuart L. Lewis, Ronald W. Wolfe

Publisher:       American Society of Civil Engineers

Year Published:   1994                      Number of Pages:    6

### **Library ID: 06-0027**

**Title:**           **Factors Influencing Timber Bridge Performance**

Author:           Kim Stanfill-McMillan, James A. Kainz

Publisher:       American Society of Civil Engineers

Year Published:   1995                      Number of Pages:    4

## **Section 06 — Monitoring and Performance *cont.***

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### **Library ID: 06-0028**

**Title:** Field Performance of Timber Bridges 6. Hoffman Run Stress-Laminated Deck Bridge

Author: Michael A. Ritter, Paula D. Hilbrich Lee, Gregory J. Porter

Publisher: USDA Forest Service, FPL

Year Published: 1996 Number of Pages: 16

### **Library ID: 06-0029**

**Title:** Field Performance of Timber Bridges 10. Sanborn Brook Stress-Laminated Deck Bridge

Author: Paula D. Hillbrich-Lee, Michael A. Ritter, James P. Wacker

Publisher: USDA Forest Service, FPL

Year Published: 1996 Number of Pages: 19

### **Library ID: 06-0030**

**Title:** Field Performance of Timber Bridges 9. Big Erick's Stress-Laminated Deck Bridge

Author: James A. Kainz, James P. Wacker, Martin Nelson

Publisher: USDA Forest Service, FPL

Year Published: 1996 Number of Pages: 24

### **Library ID: 06-0031**

**Title:** Field Performance of Timber Bridges 11. Spearfish Creek Stress-Laminated Box-Beam Bridge

Author: James P. Wacker, Michael A. Ritter, Kim Stanfill-McMillan, Nikki T. Brown, Jonathon R. Becker

Publisher: USDA Forest Service, FPL

Year Published: 1997 Number of Pages: 17

### **Library ID: 06-0032**

**Title:** Field Performance of Timber Bridges 13. Mohawk Canal Stress-Laminated Bridge

Author: Paula D. Hillbrich Lee, Xanthi Lauderdale

Publisher: USDA Forest Service, FPL

Year Published: 1997 Number of Pages: 18

### **Library ID: 06-0033**

**Title:** Field Performance of Timber Bridges 14. Dean, Hibbsville, and Decatur Stress-Laminated Deck Bridges

Author: Paula D. Hilbrich Lee, Michael A. Ritter, Steve Golston, Keith Hinds

Publisher: USDA Forest Service, FPL

Year Published: 1997 Number of Pages: 21



## **Section 06 — Monitoring and Performance *cont.***

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### **Library ID: 06-0034**

**Title:**           **Field Performance of Timber Bridges 12. Christian Hollow  
Stress-Laminated Box-Beam Bridge**

Author:           James P. Wacker, Stephen C. Catherman, Richard G. Winnett

Publisher:       USDA Forest Service, FPL

Year Published: 1998                      Number of Pages: 17

### **Library ID: 06-0035**

**Title:**           **Field Performance of Timber Bridges 15. Pueblo County, Colorado,  
Stress-Laminated Deck Bridge**

Author:           Lola E. Hislop

Publisher:       USDA Forest Service, FPL

Year Published: 1998                      Number of Pages: 19

### **Library ID: 06-0036**

**Title:**           **Field Performance of Timber Bridges 16. North Siwell Road  
Stress-Laminated Bridge**

Author:           James A. Kainz

Publisher:       USDA Forest Service, FPL

Year Published: 1998                      Number of Pages: 17

### **Library ID: 06-0037**

**Title:**           **Field Performance of Timber Bridges 17. Ciphers Stress-Laminated Deck  
Bridge**

Author:           James P. Wacker, James A. Kainz, Michael A. Ritter

Publisher:       USDA Forest Service, FPL

Year Published: 1998                      Number of Pages: 16

## Section 07 — Materials

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### **Library ID: 07-0001**

**Title: Evaluation of Yellow-Poplar Glued-Laminated Timber Beams**

Author: Roland Hernandez, Somnath Sharma Sonti, Russell C. Moody

Publisher: American Society of Agricultural Engineers

Year Published: 1992                      Number of Pages: 11

### **Library ID: 07-0002**

**Title: Performance of Red Maple Glulam Timber Beams**

Author: Harvey B. Manbeck, John J. Janowiak, Paul R. Blankenhorn, Peter Labosky, Russell C. Moody,  
Roland Hernandez

Publisher: USDA Forest Service, FPL

Year Published: 1993                      Number of Pages: 30

### **Library ID: 07-0003**

**Title: Applications of Wood Materials for Innovative Bridge Systems**

Author: Russell C. Moody, Michael A. Ritter, Hota GangaRao

Publisher: American Society of Civil Engineers

Year Published: 1990                      Number of Pages: 10

### **Library ID: 07-0004**

**Title: Yield of 2 by 4 Red Oak Stress-graded Dimension Lumber from  
Factory-grade Logs**

Author: Kent A. McDonald, James W. Whipple

Publisher: Forest Products Research Society

Year Published: 1992                      Number of Pages: 6

### **Library ID: 07-0005**

**Title: Investigation of the Mechanical Properties of Red Oak 2 By 4's**

Author: David W. Green, Kent A. McDonald

Publisher: USDA Forest Service, FPL

Year Published: 1993                      Number of Pages: 11

### **Library ID: 07-0006**

**Title: Stress Class Systems: An Idea Whose Time Has Come?**

Author: David W. Green, David E. Kretschmann

Publisher: USDA Forest Service, FPL

Year Published: 1990                      Number of Pages: 22

### **Library ID: 07-0007**

**Title: Behavior of Metal-plate Connected Joints in Creosote Treated Wood:  
A Pilot Study**

Author: M. G. Oliva, L. Krahn, M. McCarthy, M. Ritter

Publisher: Forest Products Research Society

Year Published: 1988                      Number of Pages: 5

## Section 07 — Materials *cont.*

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### **Library ID: 07-0011**

**Title:** Experimental Shear Strength of Glued-Laminated Beams

Author: Douglas R. Rammer, Lawrence A. Soltis

Publisher: USDA Forest Service, FPL

Year Published: 1994                      Number of Pages: 38

### **Library ID: 07-0012**

**Title:** Production of Hardwood Machine Stress Rated Lumber

Author: David W. Green, Robert J. Ross, and Kent A. McDonald

Publisher: Forest Products Society

Year Published: 1994                      Number of Pages: 10

### **Library ID: 07-0013**

**Title:** Yellow Poplar Glulam Timber Beam Performance

Author: Russell C. Moody, Roland Hernandez, Julio F. Davalos, Somnath Sharma Sonti

Publisher: USDA Forest Service, FPL

Year Published: 1993                      Number of Pages: 28

### **Library ID: 07-0014**

**Title:** Mechanical Properties of Red Maple Structural Lumber

Author: David W. Green, Kent A. McDonald

Publisher: USDA Forest Service, FPL

Year Published: 1993                      Number of Pages: 15

### **Library ID: 07-0015**

**Title:** Hardwood Structural Lumber From Log Heart Cants

Author: Kent A. McDonald, Curt C. Hassler, Jack E. Hawkins, Timothy L. Phal

Publisher: Forest Products Society

Year Published: 1996                      Number of Pages: 8

### **Library ID: 07-0016**

**Title:** Fiber Stress Values for Design of Glulam Timber Utility Structures

Author: Roland Hernandez, Russell C. Moody, Robert H. Falk

Publisher: USDA Forest Service, FPL

Year Published: 1995                      Number of Pages: 25

### **Library ID: 07-0017**

**Title:** Western Hardwoods, Value-Added Research and Demonstration Program

Author: David Green, William von Segen, Susan Willits

Publisher: USDA Forest Service, FPL

Year Published: 1995                      Number of Pages: 43

## Section 07 — Materials *cont.*

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### **Library ID: 07-0018**

**Title:** Probabilistic Modeling of Yellow-poplar Glued-laminated Timber

Author: Roland Hernandez

Publisher: American Society of Agricultural Engineers

Year Published: 1993                      Number of Pages: 11

### **Library ID: 07-0019**

**Title:** Red Maple Stress-graded 2 by 4 Dimension Lumber from Factory-grade Logs

Author: Kent A. McDonald, David W. Green, Jack Dwyer, James W. Whipple

Publisher: Forest Products Society

Year Published: 1993                      Number of Pages: 6

### **Library ID: 07-0020**

**Title:** Guidelines for Producing Hardwood Structural Lumber for Glulam Production

Author: John Janowiak, Jeff Kimmel

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 6

## Section 08 — Contacts

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### **Library ID: 08-0001**

**Title:** Wood In Transportation: Timber Bridge Information Contacts Report of Project Funded Bridges 1989-1995

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1996                      Number of Pages: 11

### **Library ID: 08-0002**

**Title:** American Institute of Timber Construction: Membership List

Author: AITC

Publisher: AITC

Year Published: 1994                      Number of Pages: 1

### **Library ID: 08-0003**

**Title:** Contacts Information for Glulaminated Timber Bridges

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1996                      Number of Pages: 1

### **Library ID: 08-0004**

**Title:** Contacts Information for Pedestrian and Trail Bridges

Author: NWITIC

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1996                      Number of Pages: 1

## Section 09 — Markets

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### **Library ID: 09-0001**

**Title:**           **The Potential of Producing Prefabricated, Modern Timber Bridge Components in Mississippi**

Author:           T. Amburgey, L. Breazeale, R. Daniels, P.C. McLaurin, Jr., S. Murray, L. Reinschmiedt, R. Sinno, P.H. Short, D. Trammell, Jr.

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1994                      Number of Pages:   56

### **Library ID: 09-0002**

**Title:**           **Factors Influencing the Adoption of Timber Bridges: The Role of New Technology Adoption in the Timber Bridge Market**

Author:           Robert L. Smith, Robert J. Bush

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1995                      Number of Pages:   41

### **Library ID: 09-0003**

**Title:**           **A Perceptual Investigation into the Adoption of Timber Bridges: The Role of New Technology Adoption in the Timber Bridge Market**

Author:           Robert L. Smith, Robert J. Bush

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1995                      Number of Pages:   21

### **Library ID: 09-0004**

**Title:**           **A Hierarchical Analysis of Bridge Decision Makers: The Role of New Technology Adoption in the Timber Bridge Market**

Author:           Robert L. Smith, Robert J. Bush

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1995                      Number of Pages:   22

### **Library ID: 09-0005**

**Title:**           **Marketing Practices in the Timber Bridge Industry: 1993 The Role of New Technology Adoption in the Timber Bridge Market**

Author:           Robert L. Smith, Robert J. Bush

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1995                      Number of Pages:   16

### **Library ID: 09-0006**

**Title:**           **A Strategic Evaluation of Factors Affecting the Adoption of Timber Bridges: The Role of New Technology Adoption in the Timber Bridge Market**

Author:           Robert L. Smith, Robert J. Bush

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1995                      Number of Pages:   22

## Section 09 — Markets *cont.*

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### **Library ID: 09-0007**

**Title:**           **Manufacturing and Marketing Opportunities for Modern Timber Bridges in Michigan**

Author:           Jack Pilon, Dan Sikarskie, Roger Rasmussen, Russell Kidd

Publisher:       MI DOT, MI RC&D, MI DNR - Forest Mang. Div., MI DNR - Land & Water Mang. Div., MI State Univ. Ext.,  
USDA Forest Service, NA-S&PF

Year Published:   1995                      Number of Pages:   17

### **Library ID: 09-0008**

**Title:**           **Timber Bridge Potential in the State of Wisconsin**

Author:           Lumberjack RC&D, River Country RC&D, Golden Sands RC&D, Southwest Badger RC&D, Pri-Ru-Ta RC&D

Publisher:       George Banzhaf and Company

Year Published:   1994                      Number of Pages:   83

### **Library ID: 09-0009**

**Title:**           **Decision Maker Perceptions of Timber Bridges in the United States**

Author:           Bob Smith and Robert J. Bush

Publisher:       Center for Forest Products Marketing, VA Tech.

Year Published:   1994                      Number of Pages:   4

### **Library ID: 09-0010**

**Title:**           **The Identification of Market Opportunities for Wood in the United States Transportation System, The Role of New Technology Adoption in the Timber Bridge Market: Special Project Fiscal Year 1994**

Author:           Warren Spradlin, Robert L. Smith

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1996                      Number of Pages:   30

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## Section 10 — Cost Information

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### **Library ID: 10-0001**

**Title:**           **Wood In Transportation - Superstructure Costs Report for Vehicular Timber Bridges 1989-1995**

Author:           NWITIC

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1996                      Number of Pages:   5

## Section 11 — General Information

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### **Library ID: 11-0001**

**Title:**           **Development of a Six-Year Research Needs Assessment for Timber Transportation Structures**

Author:           Terry J. Wipf, Michael A. Ritter, Sheila Rimal Duwadi, Russell C. Moody

Publisher:       USDA Forest Service, FPL

Year Published:   1993                      Number of Pages:   44

### **Library ID: 11-0002**

**Title:**           **Timber Bridges: Part of the Solution for Rural America**

Author:           Robert Brungraber, Richard Gutkowski, William Kindya, and Ruth Mc Williams

Publisher:       Transportation Research Board

Year Published:   1987                      Number of Pages:   9

### **Library ID: 11-0003**

**Title:**           **New Ideas for Timber Bridges**

Author:           Michael G. Oliva, Roger L. Tuomi, and A. G. Dimakis

Publisher:       National Research Council

Year Published:   1986                      Number of Pages:   6

### **Library ID: 11-0004**

**Title:**           **Current Timber Bridge Research and Development in the United States**

Author:           Michael A. Ritter

Publisher:       USDA Forest Service, FPL

Year Published:   1993                      Number of Pages:   10

### **Library ID: 11-0008**

**Title:**           **User Friendly Guide to Timber Bridges**

Author:           Chris Donnelly

Publisher:       University of New Hampshire - Continuing Education

Year Published:   1996                      Number of Pages:   56

### **Library ID: 11-0009**

**Title:**           **Technical Note 1: Publications Listing for Wood In Transportation**

Author:           James Kainz

Publisher:       USDA Forest Service, FPL

Year Published:   1995                      Number of Pages:   6

### **Library ID: 11-0010**

**Title:**           **Research on Timber Bridges and Related Topics**

Author:           Sheila Rimal Duwadi, Michael A. Ritter

Publisher:       USDA Forest Service, FPL

Year Published:   1995                      Number of Pages:   22

## Section 11 — General Information *cont.*

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### **Library ID: 11-0011**

**Title:** Timber Bridges - A Rebirth

Author: Russ Moody

Publisher: Woodland Management

Year Published: 1994                      Number of Pages: 3

### **Library ID: 11-0012**

**Title:** Wood Bridges in New England

Author: Michael A. Ritter, Kim Stanfill-McMillan

Publisher: American Society of Civil Engineers

Year Published: 1995                      Number of Pages: 4

### **Library ID: 11-0018**

**Title:** Rural Bridges: An Assessment Based Upon the National Bridge Inventory

Author: Nicholas Marathon

Publisher: USDA Office of Transportation

Year Published: 1989                      Number of Pages: 26

### **Library ID: 11-0019**

**Title:** Engineered Wood for Transportation Structures Workshop Record

Author: WVU-CFC

Publisher: WVU-CFC

Year Published: 1994                      Number of Pages: 70

### **Library ID: 11-0020**

**Title:** Research Accomplishments for Wood Transportation Structures Based on a National Research Need Assessment

Author: Michael A. Ritter, Sheila Rimal Duwadi

Publisher: USDA Forest Service, FPL

Year Published: 1998                      Number of Pages: 30

### **Library ID: 11-0021**

**Title:** Bridge Scour Evaluation: Screening, Analysis, and Countermeasures

Author: John Kattell, Merv Eriksson

Publisher: USDA Forest Service, San Dimas Technology and Development Center

Year Published: 1998                      Number of Pages: 20

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## Section 12 — Surfacing

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### **Library ID: 12-0001**

**Title:** Surfacing Treated Decks with Bituminous Materials

Author: Larry Bruesch, Adrian Pelzner

Publisher: USDA Forest Service, FPL

Year Published: 1976                      Number of Pages: 3



## Section 13 — Financial Information

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### **Library ID: 13-0003**

**Title:**           **A Hypothetical Business and Financial Plan of the Production of Glulam Lumber for Timber Bridge Construction**

Author:           Dwight R. McCurdy, John E. Phelps

Publisher:       Department of Forestry, Southern Illinois University

Year Published:   1993                      Number of Pages:    51

## Section 14 — Crossings Newsletter

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*Crossings* is the quarterly newsletter of the Wood In Transportation Program. You can view and download past issues of *Crossings* from our website at [www.fs.fed.us/na/wit](http://www.fs.fed.us/na/wit). If you would like to receive *Crossings* on a quarterly basis please check 01-0004.

## Section 15 — Demonstration Project Factsheets

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### **Library ID: 15-0001**

**Title:**           **Baileyville Demonstration Timber Bridge, Centre County, Pennsylvania**

Author:           NWITIC and Partners

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1998                      Number of Pages:    2

Abstract: This factsheet provides information on a demonstration bridge design that consists of glued-laminated timber stringers and a transverse glued-laminated timber deck. Wood species is red oak. Preservative treatment is creosote.

### **Library ID: 15-0002**

**Title:**           **Brookston Road Demonstration Timber Bridge, Forest County, Pennsylvania**

Author:           NWITIC and Partners

Publisher:       USDA Forest Service, NA-S&PF

Year Published:   1998                      Number of Pages:    2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber/steel composite bridge. Wood species is red oak. Preservative treatment is creosote.

### **Library ID: 15-0003**

**Title:**           **County Timber Bridge #3, Green County, Pennsylvania**

Author:           NWITIC and Partners

Publisher:       UADS Forest Service, NA-S&PF

Year Published:   1998                      Number of Pages:    2

Abstract: This factsheet provides information on a demonstration timber bridge project. The design consists of steel stringers and a transverse glued-laminated deck. Wood species is red maple. Preservative treatment is creosote.

## **Section 15 — Demonstration Project Factsheets *cont.***

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### **Library ID: 15-0004**

**Title:** Dutch Hill Road Timber Bridge, Crawford County, Pennsylvania

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is red maple. Preservative treatment is creosote.

### **Library ID: 15-0005**

**Title:** Millcross Road Timber Bridge, Lancaster County, Pennsylvania

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is Douglas-fir. Preservative treatment is creosote.

### **Library ID: 15-0006**

**Title:** Trough Creek State Park Timber Bridge, Huntingdon County, Pennsylvania

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a glued-laminated arch and a transverse glued-laminated deck. Wood species are southern pine and red maple. Preservative treatment is

### **Library ID: 15-0007**

**Title:** County Bridge 134, Perry County, Indiana

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated T bridge. Wood species are southern pine and red oak. Preservative treatment is creosote.

### **Library ID: 15-0008**

**Title:** Wolf Run Road Timber Bridge, Jefferson County, Indiana

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is red oak. Preservative treatment is creosote.

## **Section 15 — Demonstration Project Factsheets *cont.***

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### **Library ID: 15-0009**

**Title:** Emily Lake Road Box Culvert, Houghton County, Michigan

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a box culvert. Wood species is hemlock. Preservative treatment is chromated copper arsenate.

### **Library ID: 15-0010**

**Title:** Graves Crossing Timber Bridge, Antrim County, Michigan

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is red pine. Preservative treatment is chromated copper arsenate.

### **Library ID: 15-0011**

**Title:** Main Black Timber Bridge, Montmorency County, Michigan

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated boxbeam bridge. Wood species southern pine and red pine. Preservative treatment is creosote.

### **Library ID: 15-0012**

**Title:** Old Vanderbilt Road Timber Bridge, Otsego County, Michigan

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is red pine. Preservative treatment is creosote.

### **Library ID: 15-0013**

**Title:** Portable Logging Demonstration Timber Bridge, Michigan

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber portable bridge. Wood species is red pine. Preservative treatment is chromated copper arsenate.

## Section 15 — Demonstration Project Factsheets *cont.*

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### **Library ID: 15-0014**

**Title:** Huntsman Road Timber Bridge, Richland County, Ohio

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is southern pine. Preservative treatment is alkaline copper quat.

### **Library ID: 15-0015**

**Title:** Meigsville Township 150 Timber Bridge, Morgan County, Ohio

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a box culvert. This factsheet provides information on a demonstration timber bridge project. Wood species is southern pine. Preservative treatment is chromated copper arsenate.

### **Library ID: 15-0016**

**Title:** Local Timber Bridge No. 1-5, Allegany County, New York

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type consists of steel stringers supporting a transverse glued-laminated deck. Wood species are beech and hickory. Preservative treatment is pentachlorophenol.

### **Library ID: 15-0017**

**Title:** Local Timber Bridge No. 5-1, Allegany County, New York

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type consists of steel stringers with a stress-laminated sawn lumber deck. Wood species is beech and hickory. Preservative treatment is pentachlorophenol.

### **Library ID: 15-0018**

**Title:** Local Timber Bridge No. 25-8, Allegany County, New York

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is consists of bolted n-frame units. Wood species include mixed hardwoods including red maple, hickory, and beech. Preservative treatment is pentachlorophenol.

## Section 15 — Demonstration Project Factsheets *cont.*

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### **Library ID: 15-0019**

**Title:** Nelson Slough Timber Bridge, Skagway, Alaska

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999 Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is Alaska yellow-cedar. No preservative treatment is required for Alaska yellow-cedar.

### **Library ID: 15-0020**

**Title:** East Fork Rosebud Creek Timber Bridge, Carbon County, Montana

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999 Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type glued-laminated timber stringers supporting a transverse glued-laminated decks. Wood species is Douglas-fir. Preservative treatment is creosote.

### **Library ID: 15-0021**

**Title:** Timber Bridge No. 1, Coshocton County, Ohio

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999 Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is southern pine. Preservative treatment is creosote.

### **Library ID: 15-0022**

**Title:** Oak Drive Timber Bridge, Stark County, Ohio

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999 Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated t-beam with southern pine glulam beams and sawn northern red oak flange. Wood specie are southern pine and northern red oak. Preservative treatment is creosote.

### **Library ID: 15-0023**

**Title:** Kepler-Bradley Lakes Timber Bridge, Matanuska-Susitna Borough, Alaska

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999 Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is Alaska white spruce. Preservative treatment is copper sulfate and sodium fluoride using double diffusion treatment process.

## **Section 15 — Demonstration Project Factsheets *cont.***

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### **Library ID: 15-0024**

**Title:** Little Bitterroot River Timber Bridge, Sanders County, Montana

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a stress-laminated sawn lumber bridge. Wood species is Coast Douglas-fir. Preservative treatment is copper naphthenate (2% copper).

### **Library ID: 15-0025**

**Title:** Lynn Run Trail Bridge #1, Westmoreland County, Pennsylvania

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a king post truss design. Wood species is hemlock. Preservative treatment is chromated copper arsenate.

### **Library ID: 15-0026**

**Title:** Lynn Run Trail Bridge #2, Westmoreland County, Pennsylvania

Author: NWITIC and Partners

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1999                      Number of Pages: 2

Abstract: This factsheet provides information on a demonstration timber bridge project. The type is a king post truss design. Wood species is hemlock. Preservative treatment is chromated copper arsenate.

## **Section 97 — Videos**

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### **Library ID: 97-0014**

**Title:** Modern Timber Bridges: An Attractive Option

Author: Alabama Forestry Commission in cooperation with the USDA Forest Service

Publisher: Alabama Forestry Commission

Year Published:                      Number of Minutes: 16

Abstract: This video looks at modern timber bridges as an attractive option. It includes statistics on structurally deficient bridges, reasons for choosing modern timber bridges, design standards, components of the bridges, and gives definitions of glued-laminated (glulam) and stressed-laminated bridges. There is also construction of a glulam bridge and a discussion on the advantage of the modern timber bridge.

### **Library ID: 97-0026**

**Title:** Prefabricated Timber Bridge Deck Panels

Author: John Smolen

Publisher: USDA Forest Service, NA-S&PF

Year Published: 1998                      Number of Minutes: 11

Abstract: This video illustrates a relatively low cost method for fabrication of timber decks over steel girders using methods developed by John Smolen, County Engineer for Ashtabula County, Ohio.

## **Additional Sources of Information**

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### **American Association of State Highway and Transportation Officials (AASHTO)**

AASHTO List of Publications.

Contact: American Association of State Highway & Transportation Officials  
444 N. Capitol St. N.W., Suite 249  
Washington, DC 20001  
Telephone: (202) 624-5800  
FAX: (202) 624-5806

### **American Forest and Paper Association**

National Design Specifications for Wood Construction.

Structural Lumber/Glued-Laminated Timber/Timber Piles/Connections.

Contact: American Forest and Paper Association  
1111 19th Street, N.W., Suite 800  
Washington, DC 20036  
Telephone: (202) 463-2766  
FAX: (202) 463-2791

### **American Institute of Timber Construction (AITC)**

Standard Specifications for Structural Glued Laminated Timber

American National Standard for Wood Products – Structural Glued Laminated Timber

Contact: American Institute of Timber Construction  
7012 S. Revere Parkway, Suite 140  
Englewood, CO 80112  
Telephone: (303) 792-9559  
FAX: (303) 792-0669

### **American Plywood Association – The Engineered Wood Association**

Glued Laminated Beam Design Tables - Data Files

Glulam Connection Details

Preservative Treatment of Glued Laminated Timber

Substitution of Glulam Beams for Steel or Solid-Sawn Lumber – Data File

Contact: American Plywood Association – The Engineered Wood Association  
7011 South 19th Street  
P.O. Box 11700  
Tacoma, WA 98411-0700  
Telephone: (206) 565-6600  
FAX: (206) 565-7265

### **American Wood Preservers Institute**

Answers to Often-Asked Questions about Treated Wood

Contact: American Wood Preservers Institute  
2750 Prosperity Avenue, Suite 550  
Fairfax, VA 22031-4312  
Telephone: (703) 204-0500  
FAX: (703) 204-4610

## **Additional Sources of Information *continued***

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### **American Wood-Preservers' Association**

American Wood-Preservers' Association Standards

Contact: American Wood-Preservers' Association  
P.O. Box 3246  
Fall Creek Highway, Suite 190  
Granbury, TX 76049-7979  
Telephone: (817) 326-6300  
FAX: (817) 326-6306

### **Asphalt Institute**

Asphalt in Pavement Maintenance.

Asphalt Overlays for Highway and Street Rehabilitation – Manual Series No. 17.

Contact: Asphalt Institute, Inc.  
P.O. Box 14052  
Lexington, KY 40512-4052  
Telephone: (606) 288-4960  
FAX: (606) 288-4999

### **Federal Highway Administration**

A Guide to Federal-Aid Programs, Projects, and Other Uses of Highway Funds. Publication No. FWHA-PD-92-018.

Contact: Federal Highway Administration  
Office of Engineering, HNG-10  
400 7th Street, S.W., Room 3134  
Washington, DC 20590  
Telephone: (202) 366-0450  
FAX: (202) 366-3988

### **National Timber Piling Council, Inc.**

Technical Guidelines for Construction with Treated Round Timber Piling

Contact: National Timber Piling Council, Inc.  
446 Park Avenue  
Rye, NY 10580  
Telephone: (914) 835-0006  
FAX: (914) 835-0007

### **Pennsylvania Department of Transportation**

Standards for Hardwood Glulam Timber Bridge Design. Series BLC-560, Hardwood Glulam Timber Spans 18 Ft.–90 Ft.

Contact: Pennsylvania Department of Transportation  
Publication Sales Store, Room G127  
Transportation and Safety Building  
Harrisburg, PA 17120  
Telephone: (717) 787-6746  
FAX: (717) 787-8779

### **Transportation Research Board / National Research Council**

Contact: Transportation Research Board / National Research Council  
2101 Constitution Avenue, N.W.  
Washington, DC 20418  
Telephone: (202) 334-2933  
FAX: (202) 334-2003



## **Additional Sources of Information *continued***

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### **USDA Forest Service, Missoula Technology and Development Center**

Lead-Based Paint: Abatement Alternative for Bridges

Contact: USDA Forest Service, Missoula Technology and Development Center  
Building 1, Fort Missoula  
Missoula, MT 59804  
Telephone: (406) 329-3900  
FAX: (406) 329-3719  
Internet: <http://fsweb.mtdc.wo.fs.fed.us>

### **USDA Forest Service, San Dimas Technology and Development Center**

Bridge Scour Evaluation: Screening, Analysis, and Countermeasures

Contact: USDA Forest Service, San Dimas Technology and Development Center  
444 E. Bonita Avenue  
San Dimas, CA 91773  
Telephone: (909) 599-1267  
FAX: (909) 592-2309  
Internet: <http://fsweb.sdtc.wo.fs.fed.us>

### **Western Wood Preservers Institute/Canadian Institute of Treated Wood**

Best Management Practices for the Use of Treated Wood in Aquatic Environments.

Contact: Western Wood Preservers Institute  
7017 N.E. Highway 99, Suite 108  
Vancouver, WA 98665  
Telephone: (360) 693-9958 or (800) 729-WOOD  
FAX: (360) 693-9967  
E-mail: [wwpi@teleport.com](mailto:wwpi@teleport.com)  
or  
Canadian Institute of Treated Wood  
200-2430 Don Reid Drive  
Ottawa, ON K1H 8P5  
Canada  
Telephone: (613) 737-4337  
FAX: (613) 247-0540

**01 – Wood In Transportation Program Information**

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**04 – Maintenance and Rehabilitation**

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**05 – Preservative Treatment**

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**06 – Monitoring and Performance**

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**07 – Materials**

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**08 – Contacts**

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**09 – Markets**

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**11 – General Information**

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**12 – Surfacing**

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**13 – Financial Information**

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**15 – Demonstration Project Fact Sheets**

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**97 – Videos**

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